

Data File : BF100640.D  
Acq On : 16 Nov 2017 19:35  
Operator : SJ/JU  
Sample : I6404-01 20X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
W-1

Quant Time: Nov 17 01:10:24 2017  
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF110817.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Nov 16 12:15:03 2017  
Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.88  | 152  | 105337   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.16  | 136  | 418254   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.92  | 164  | 197492   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.40 | 188  | 361273   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 14.04 | 240  | 226451   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.52 | 264  | 227956   | 20.00 | ng    | 0.00     |

|                             |       |     |       |      |    |       |
|-----------------------------|-------|-----|-------|------|----|-------|
| System Monitoring Compounds |       |     |       |      |    |       |
| 5) 2-Fluorophenol           | 5.49  | 112 | 32097 | 4.88 | ng | -0.01 |
| 7) Phenol-d6                | 6.49  | 99  | 41771 | 5.15 | ng | -0.02 |
| 23) Nitrobenzene-d5         | 7.44  | 82  | 23219 | 3.67 | ng | -0.01 |
| 41) 2,4,6-Tribromophenol    | 10.70 | 330 | 6589  | 3.27 | ng | 0.00  |
| 44) 2-Fluorobiphenyl        | 9.23  | 172 | 59051 | 4.55 | ng | 0.00  |
| 78) Terphenyl-d14           | 12.98 | 244 | 48657 | 4.94 | ng | -0.01 |

|                            |       |     |        |       |    |        |
|----------------------------|-------|-----|--------|-------|----|--------|
| Target Compounds           |       |     |        |       |    | Qvalue |
| 50) 2,6-Dinitrotoluene     | 9.92  | 165 | 25134  | 8.42  | ng | # 24   |
| 56) 2,4-Dinitrotoluene     | 9.92  | 165 | 25134  | 6.68  | ng | # 22   |
| 70) Phenanthrene           | 11.43 | 178 | 217092 | 11.41 | ng | 99     |
| 71) Anthracene             | 11.48 | 178 | 47537  | 2.46  | ng | 98     |
| 74) Fluoranthene           | 12.62 | 202 | 330150 | 16.38 | ng | 97     |
| 77) Pyrene                 | 12.84 | 202 | 271999 | 16.85 | ng | 99     |
| 80) Benzo(a)anthracene     | 14.03 | 228 | 137323 | 10.07 | ng | 98     |
| 82) Chrysene               | 14.07 | 228 | 123916 | 9.38  | ng | 96     |
| 85) Indeno(1,2,3-cd)pyrene | 16.99 | 276 | 64737  | 6.06  | ng | 93     |
| 87) Benzo(b)fluoranthene   | 15.08 | 252 | 214166 | 15.86 | ng | 98     |
| 88) Benzo(k)fluoranthene   | 15.08 | 252 | 214166 | 16.78 | ng | 99     |
| 89) Benzo(a)pyrene         | 15.45 | 252 | 106902 | 8.93  | ng | 97     |
| 91) Benzo(g,h,i)perylene   | 17.44 | 276 | 58217  | 6.07  | ng | # 90   |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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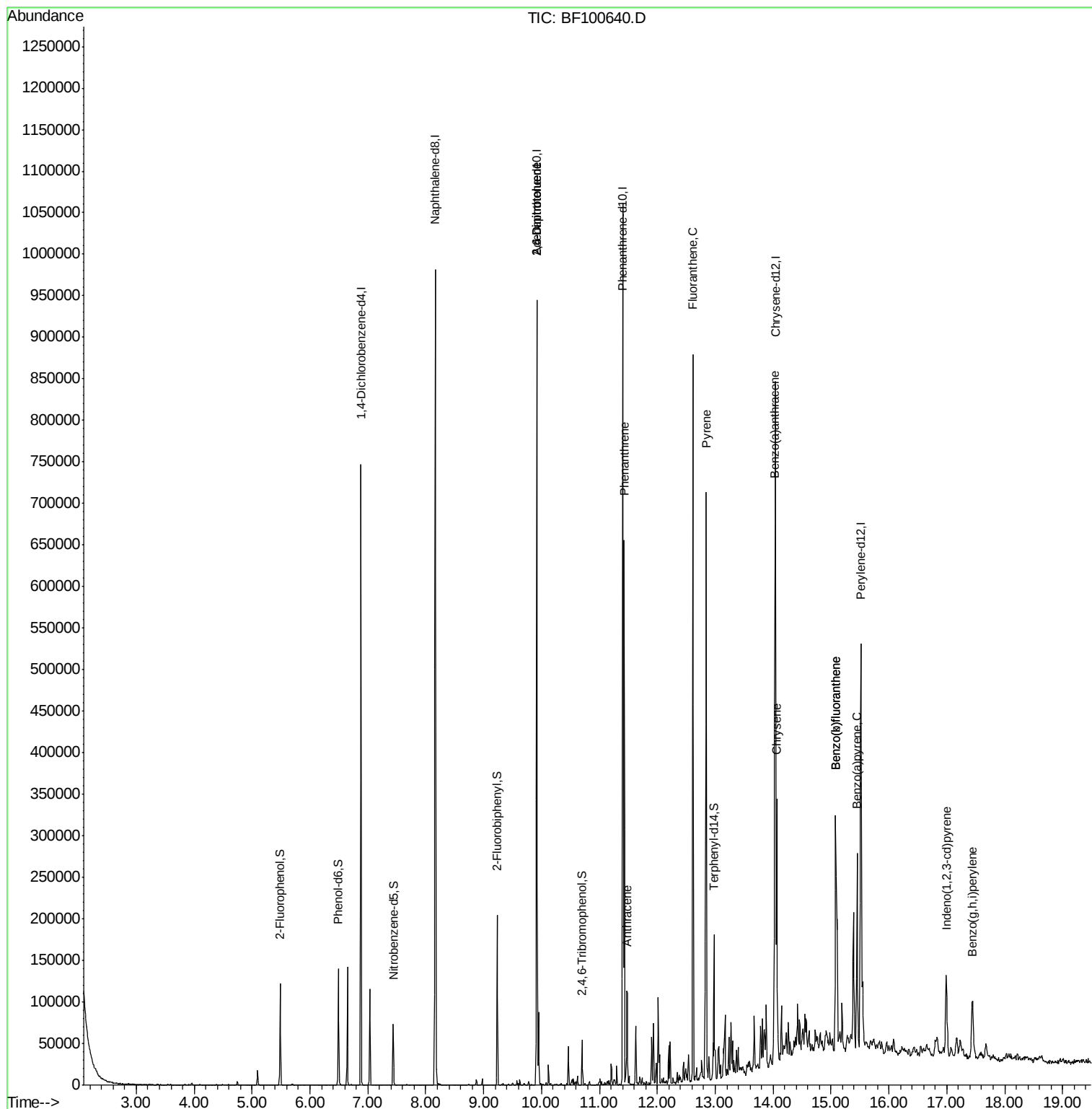
Quant Time: Nov 17 01:10:24 2017

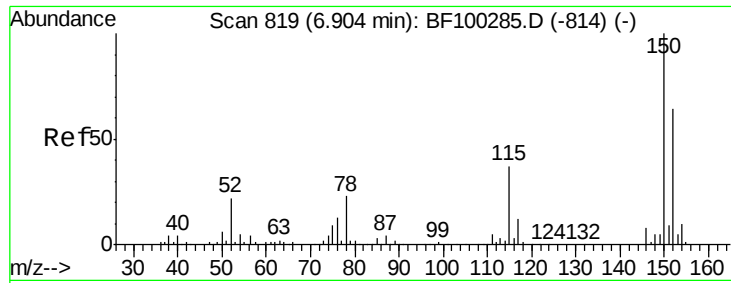
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF110817.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Nov 16 12:15:03 2017

Response via : Initial Calibration



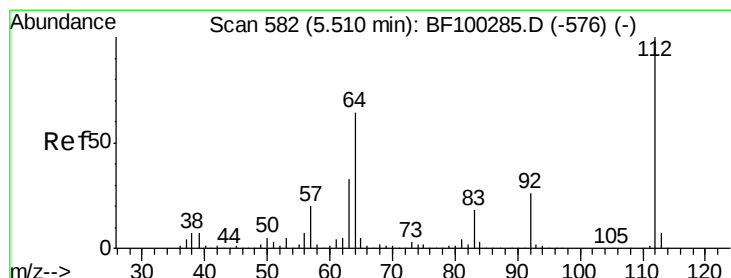
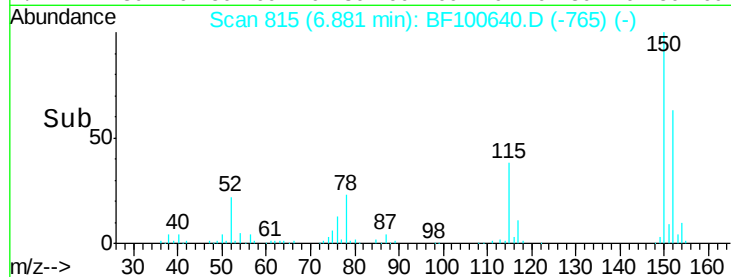
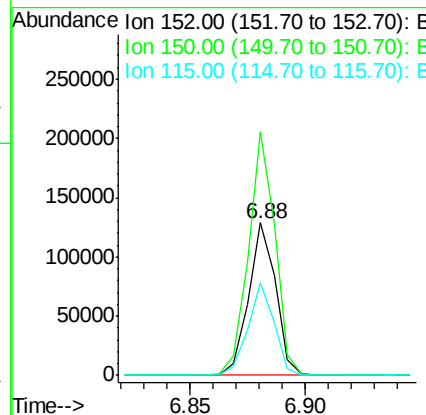
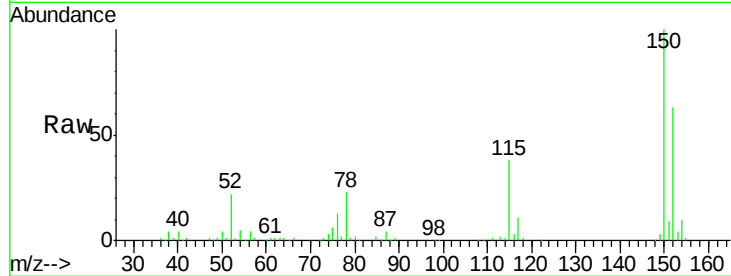


#1

1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.88 min Scan# 815  
Delta R.T. -0.01 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

Instrument :  
BNA\_F  
ClientSampled :  
W-1

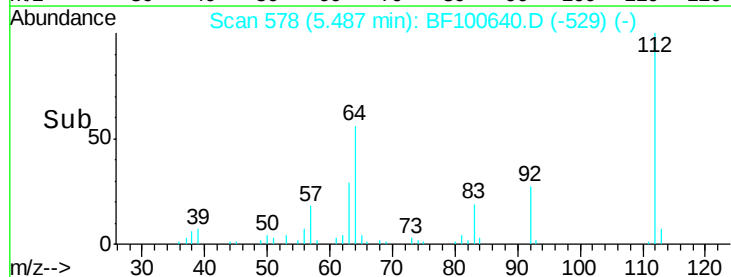
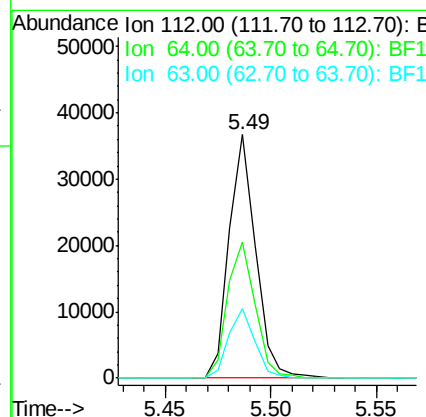
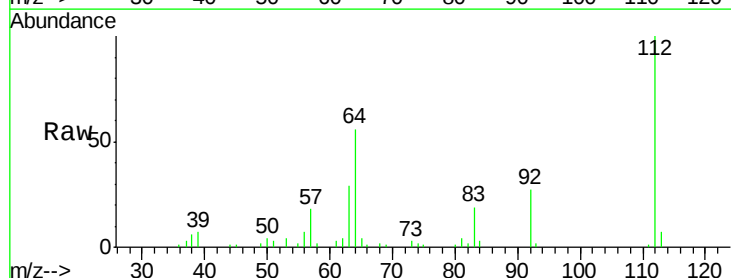
Tgt Ion:152 Resp: 105337  
Ion Ratio Lower Upper  
152 100  
150 159.7 124.6 186.8  
115 60.5 50.1 75.1

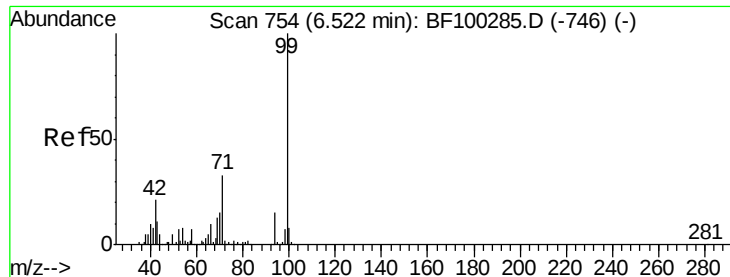


#5

2-Fluorophenol  
Concen: 4.88 ng  
RT: 5.49 min Scan# 578  
Delta R.T. -0.01 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

Tgt Ion:112 Resp: 32097  
Ion Ratio Lower Upper  
112 100  
64 56.2 47.9 71.9  
63 28.6 23.7 35.5





#7

Phenol-d6

Concen: 5.15 ng

RT: 6.49 min Scan# 749

Delta R.T. -0.02 min

Lab File: BF100640.D

Acq: 16 Nov 2017 19:35

Instrument :

BNA\_F

ClientSampleId :

W-1

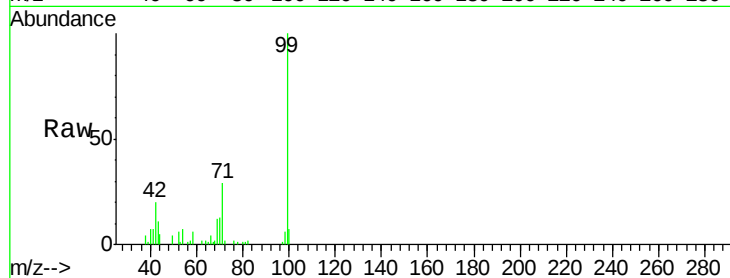
Tgt Ion: 99 Resp: 41771

Ion Ratio Lower Upper

99 100

42 19.5 14.5 21.7

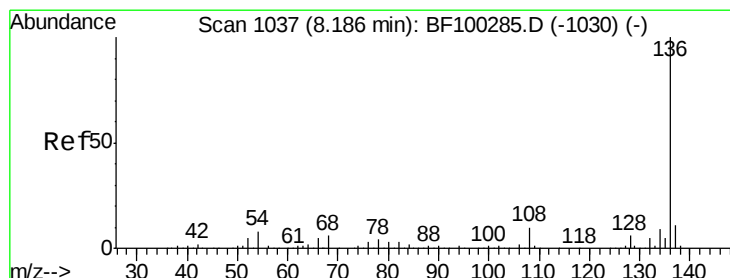
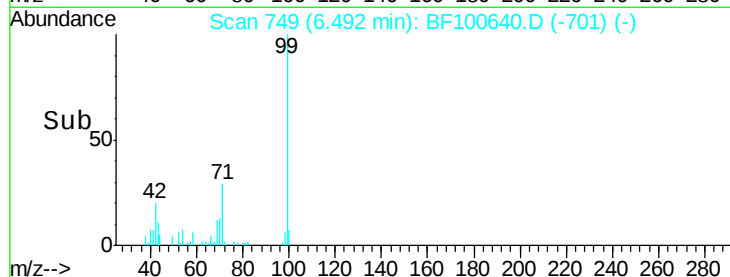
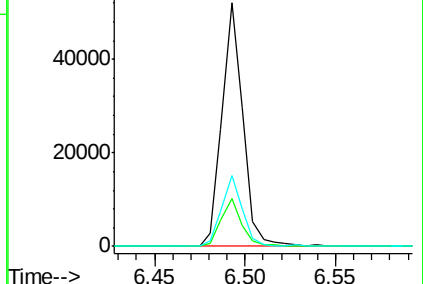
71 28.8 25.4 38.0



Abundance Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.16 min Scan# 1033

Delta R.T. -0.01 min

Lab File: BF100640.D

Acq: 16 Nov 2017 19:35

Tgt Ion: 136 Resp: 418254

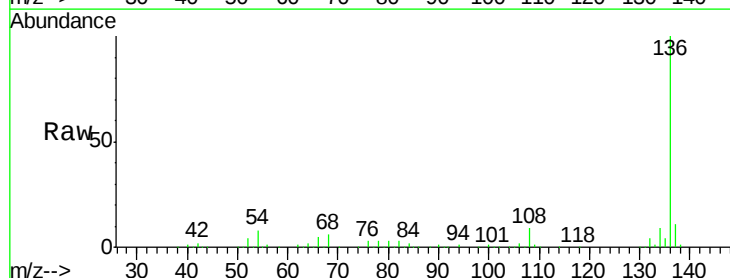
Ion Ratio Lower Upper

136 100

137 11.3 8.9 13.3

54 8.3 6.6 9.8

68 5.8 5.0 7.4

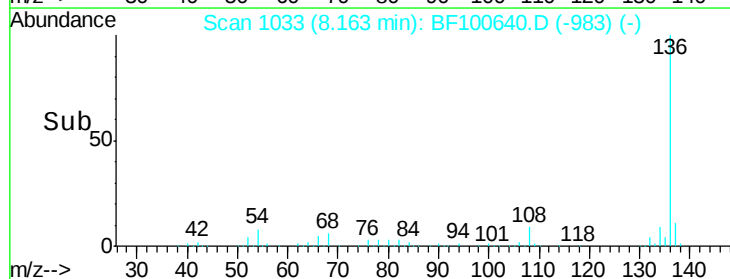
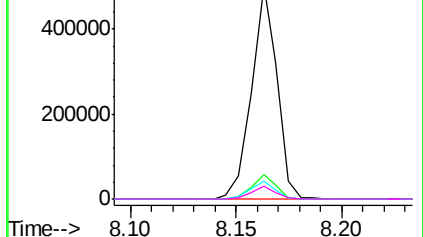


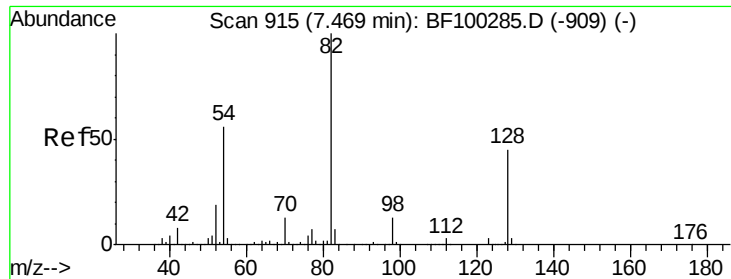
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1

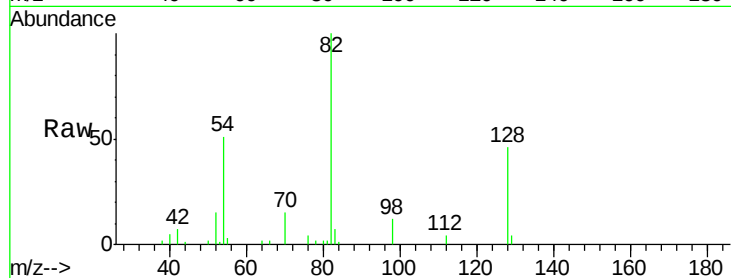




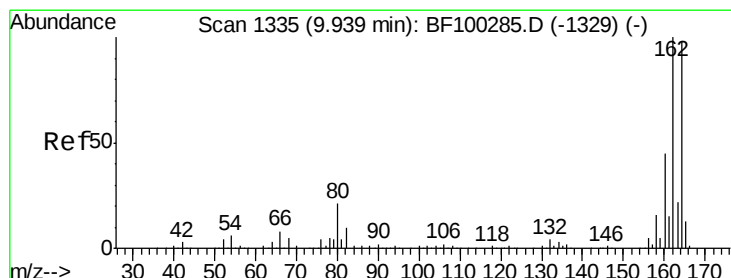
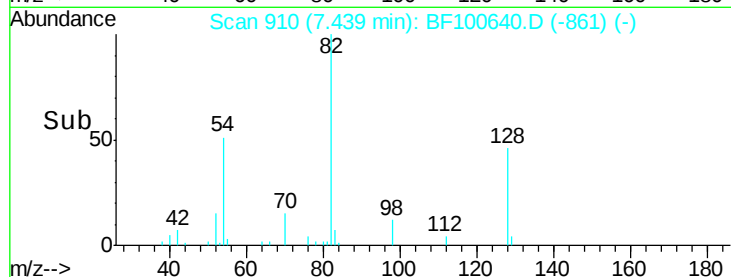
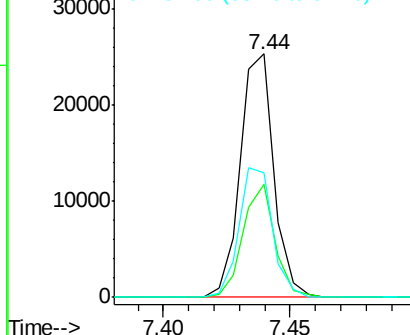
#23  
Nitrobenzene-d5  
Concen: 3.67 ng  
RT: 7.44 min Scan# 910  
Delta R.T. -0.01 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

Instrument :  
BNA\_F  
ClientSampleId :  
W-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 46.4  | 36.1  | 54.1  |
| 54      | 51.1  | 41.4  | 62.2  |

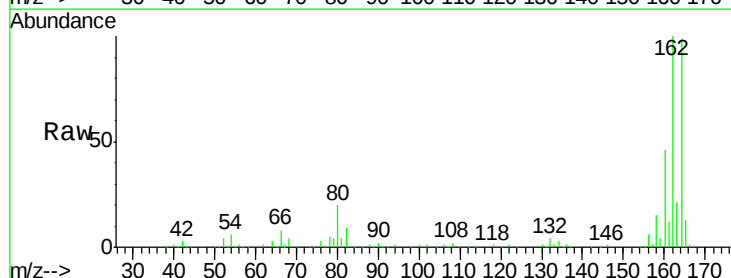


Abundance Ion 82.00 (81.70 to 82.70): BF1  
Ion 128.00 (127.70 to 128.70): BF1  
Ion 54.00 (53.70 to 54.70): BF1

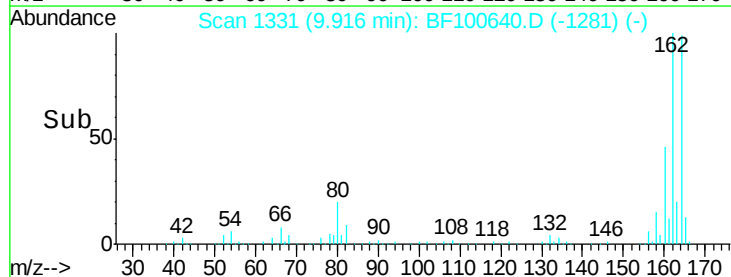
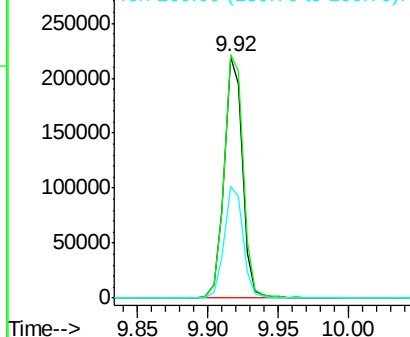


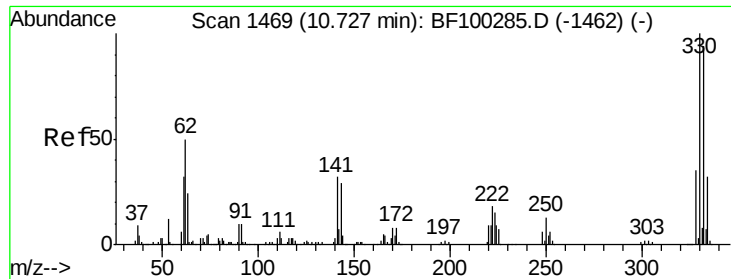
#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 9.92 min Scan# 1331  
Delta R.T. -0.01 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 101.0 | 86.1  | 129.1 |
| 160     | 46.1  | 38.3  | 57.5  |



Abundance Ion 164.00 (163.70 to 164.70): BF1  
Ion 162.00 (161.70 to 162.70): BF1  
Ion 160.00 (159.70 to 160.70): BF1

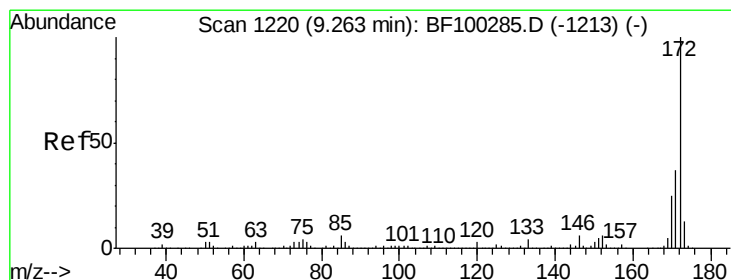
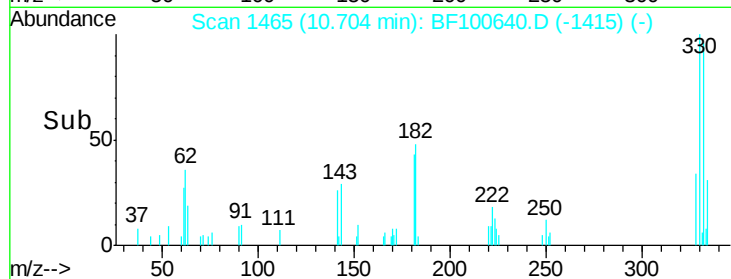
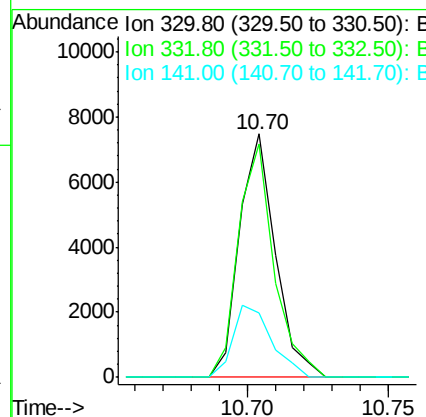
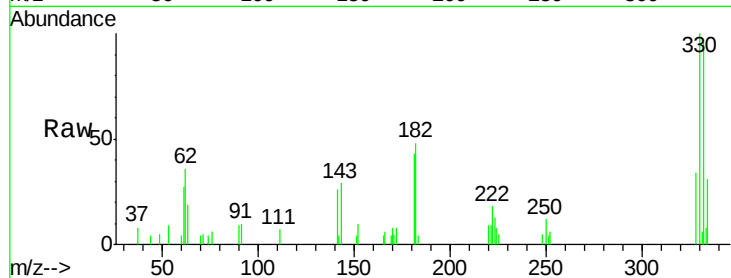




#41  
 2,4,6-Tribromophenol  
 Concen: 3.27 ng  
 RT: 10.70 min Scan# 1465  
 Delta R.T. -0.01 min  
 Lab File: BF100640.D  
 Acq: 16 Nov 2017 19:35

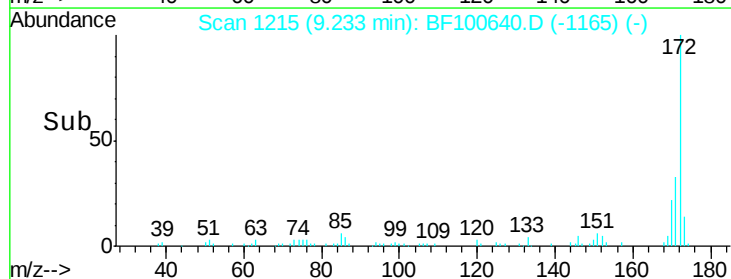
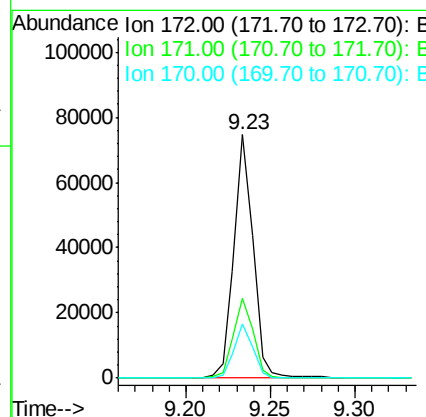
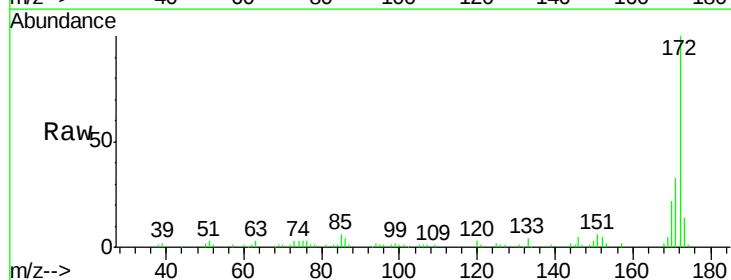
Instrument :  
 BNA\_F  
 ClientSampled :  
 W-1

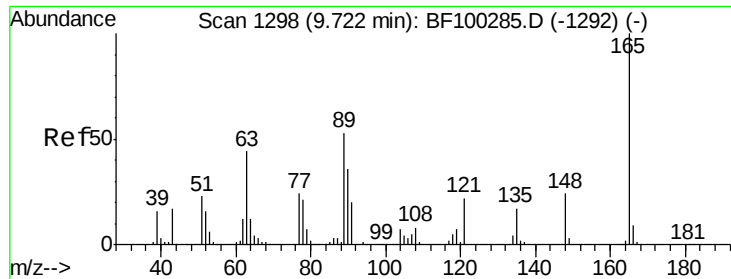
Tgt Ion: 330 Resp: 6589  
 Ion Ratio Lower Upper  
 330 100  
 332 95.8 77.0 115.6  
 141 31.9 29.9 44.9



#44  
 2-Fluorobiphenyl  
 Concen: 4.55 ng  
 RT: 9.23 min Scan# 1215  
 Delta R.T. -0.01 min  
 Lab File: BF100640.D  
 Acq: 16 Nov 2017 19:35

Tgt Ion: 172 Resp: 59051  
 Ion Ratio Lower Upper  
 172 100  
 171 33.0 29.7 44.5  
 170 22.3 19.6 29.4

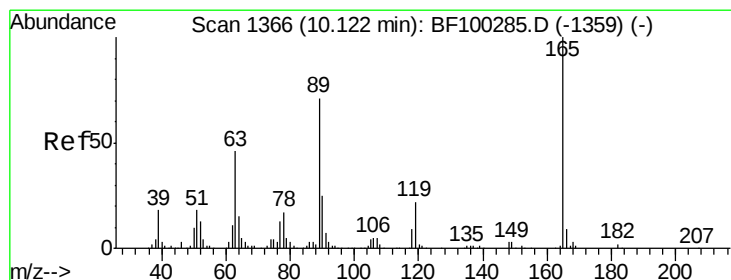
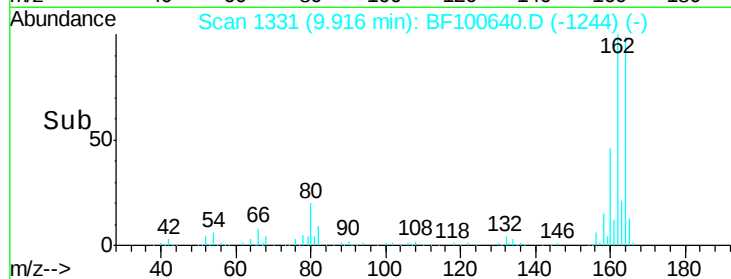
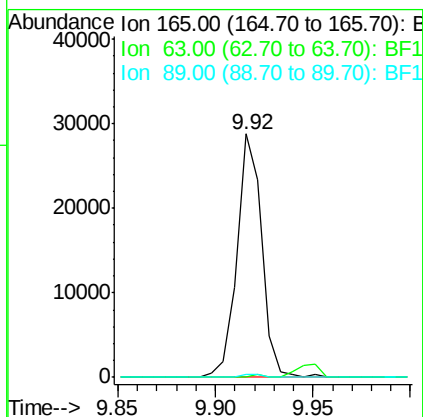
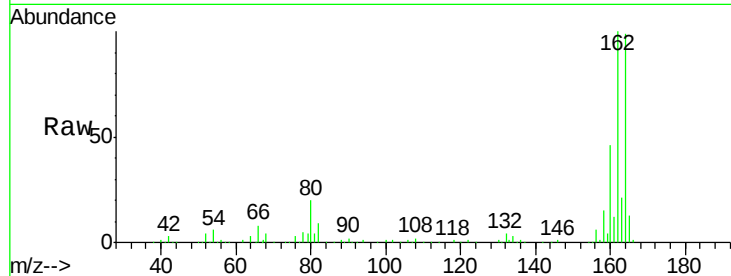




#50  
 2,6-Dinitrotoluene  
 Concen: 8.42 ng  
 RT: 9.92 min Scan# 1331  
 Delta R.T. 0.21 min  
 Lab File: BF100640.D  
 Acq: 16 Nov 2017 19:35

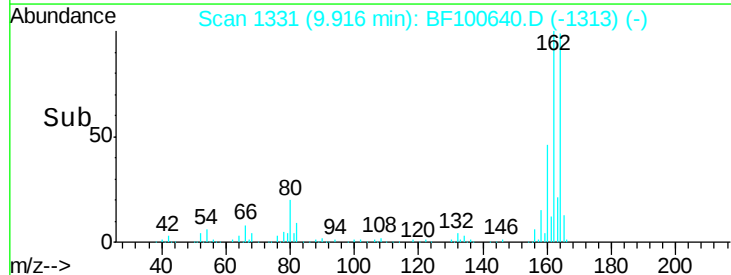
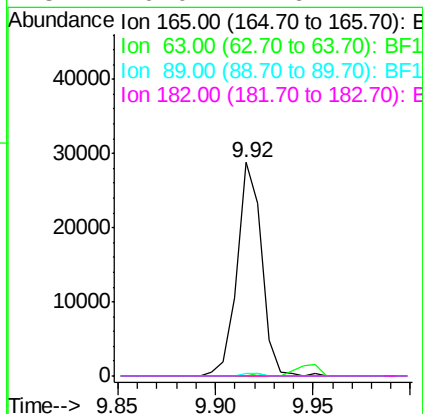
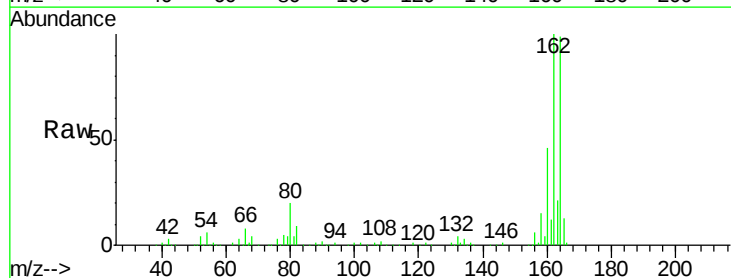
Instrument :  
 BNA\_F  
 ClientSampleId :  
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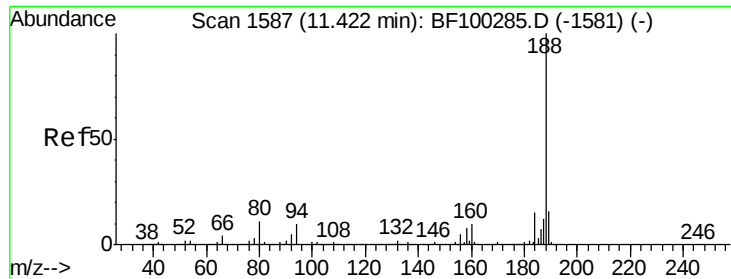
Tgt Ion:165 Resp: 25134  
 Ion Ratio Lower Upper  
 165 100  
 63 0.0 44.7 67.1#  
 89 1.1 44.0 66.0#



#56  
 2,4-Dinitrotoluene  
 Concen: 6.68 ng  
 RT: 9.92 min Scan# 1331  
 Delta R.T. -0.19 min  
 Lab File: BF100640.D  
 Acq: 16 Nov 2017 19:35

Tgt Ion:165 Resp: 25134  
 Ion Ratio Lower Upper  
 165 100  
 63 0.0 36.4 54.6#  
 89 1.1 57.8 86.6#  
 182 0.0 1.6 2.4#

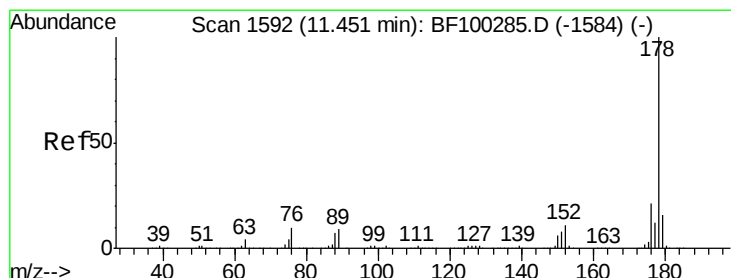
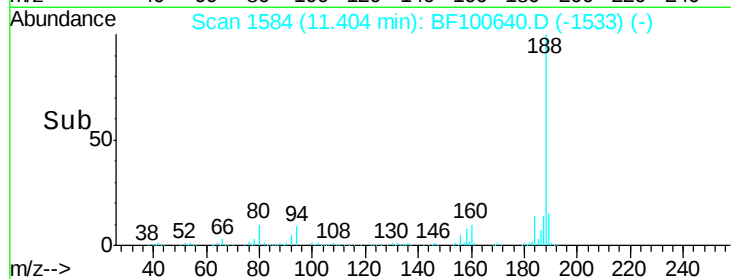
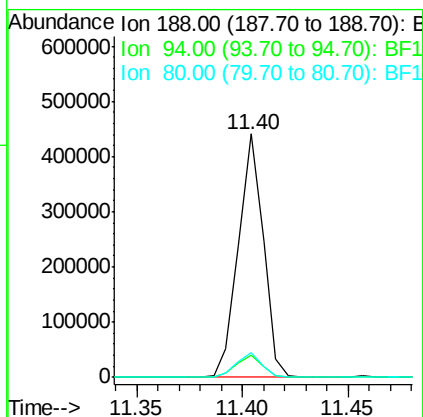
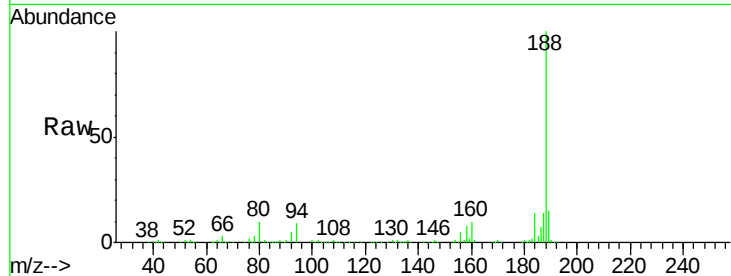




#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.40 min Scan# 1584  
Delta R.T. 0.00 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

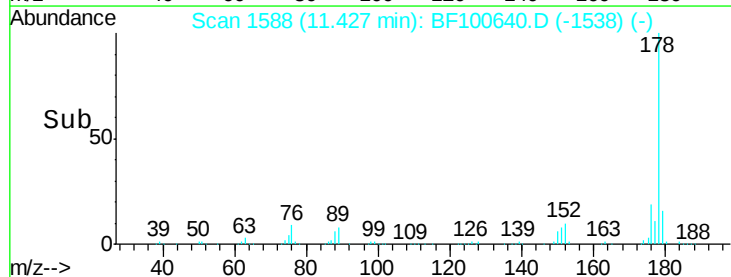
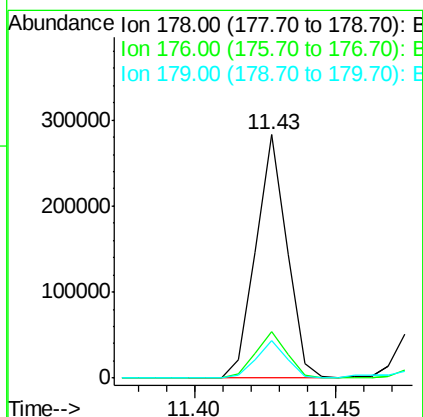
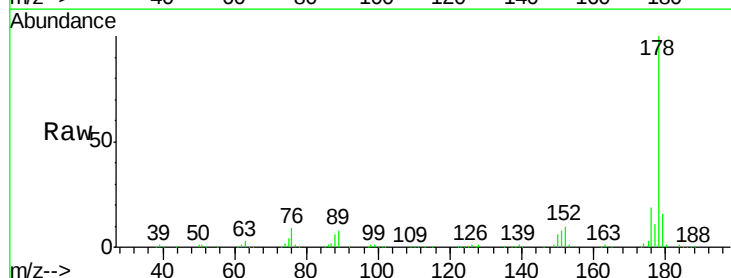
Instrument :  
BNA\_F  
ClientSampleId :  
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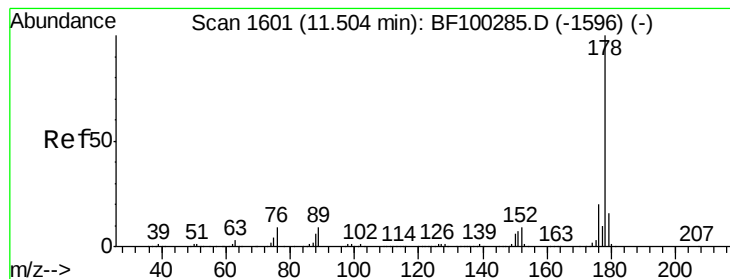
Tgt Ion:188 Resp: 361273  
Ion Ratio Lower Upper  
188 100  
94 9.1 8.5 12.7  
80 10.0 9.2 13.8



#70  
Phenanthrene  
Concen: 11.41 ng  
RT: 11.43 min Scan# 1588  
Delta R.T. -0.01 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

Tgt Ion:178 Resp: 217092  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.8 23.8  
179 15.6 13.0 19.6





#71

Anthracene

Concen: 2.46 ng

RT: 11.48 min Scan# 1597

Delta R.T. -0.01 min

Lab File: BF100640.D

Acq: 16 Nov 2017 19:35

Instrument :

BNA\_F

ClientSampleId :

W-1

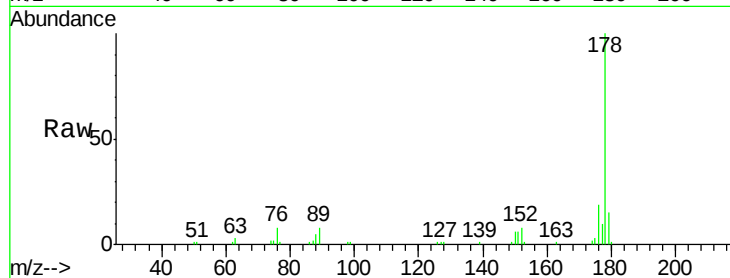
Tgt Ion:178 Resp: 47537

Ion Ratio Lower Upper

178 100

176 18.7 15.4 23.2

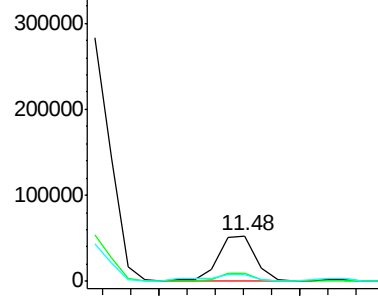
179 15.0 12.6 19.0



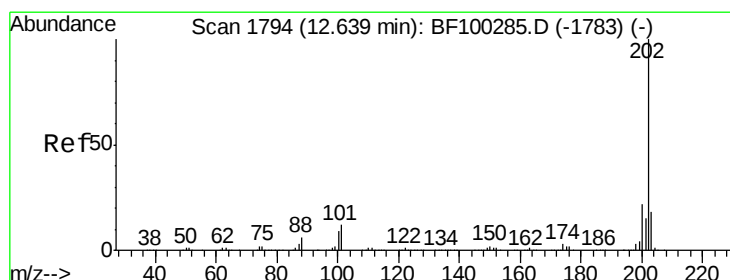
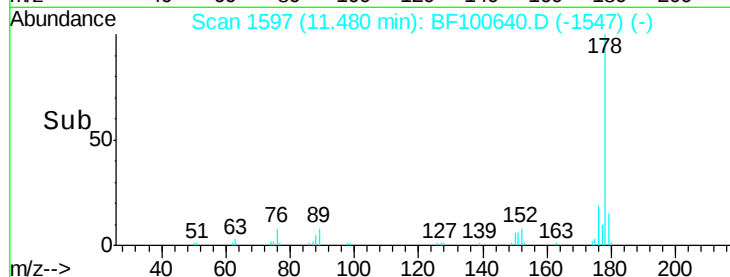
Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



Time-->



#74

Fluoranthene

Concen: 16.38 ng

RT: 12.62 min Scan# 1790

Delta R.T. -0.01 min

Lab File: BF100640.D

Acq: 16 Nov 2017 19:35

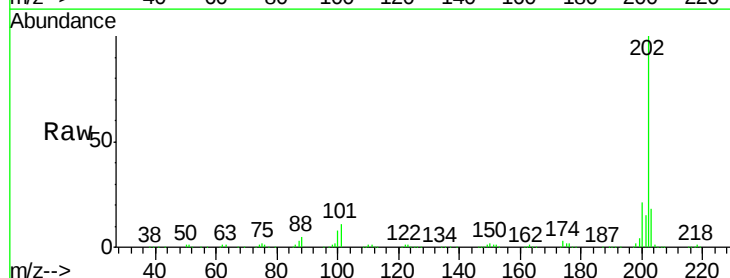
Tgt Ion:202 Resp: 330150

Ion Ratio Lower Upper

202 100

101 11.3 0.0 34.1

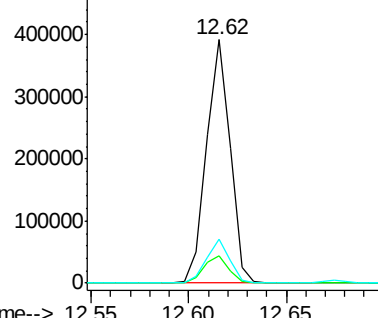
203 17.9 0.0 38.1



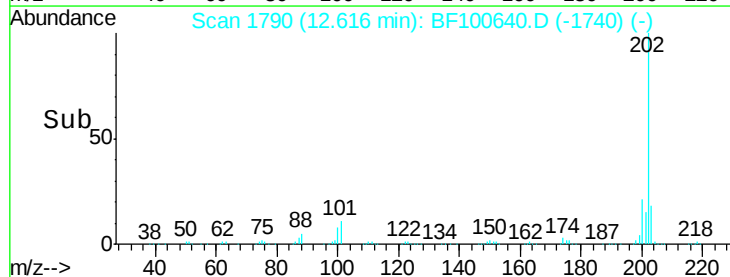
Abundance Ion 202.00 (201.70 to 202.70): E

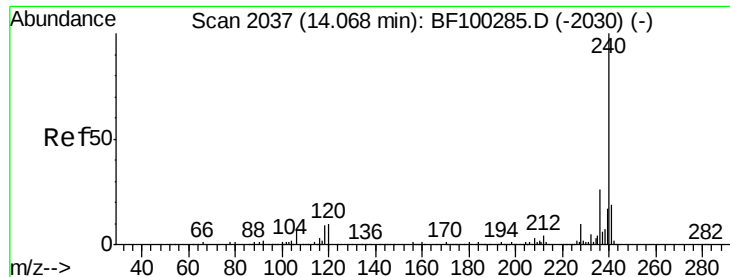
Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



Time-->





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.04 min Scan# 2032

Delta R.T. -0.01 min

Lab File: BF100640.D

Acq: 16 Nov 2017 19:35

Instrument :

BNA\_F

ClientSampleId :

W-1

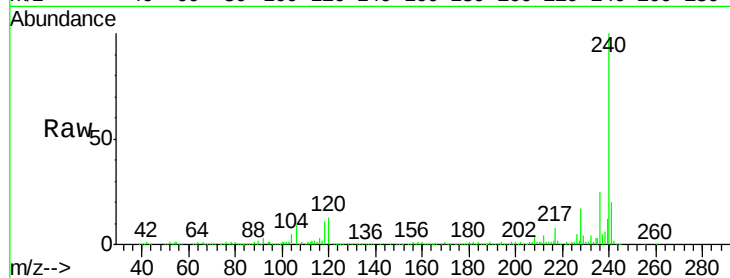
Tgt Ion:240 Resp: 226451

Ion Ratio Lower Upper

240 100

120 12.6 9.5 14.3

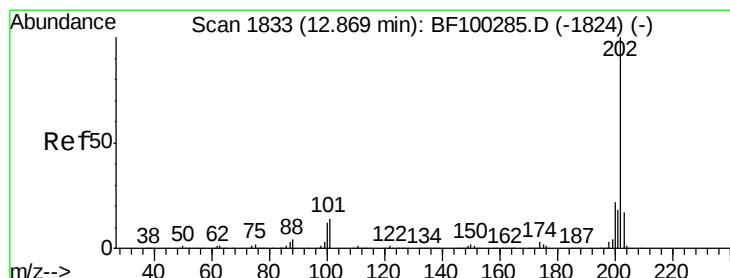
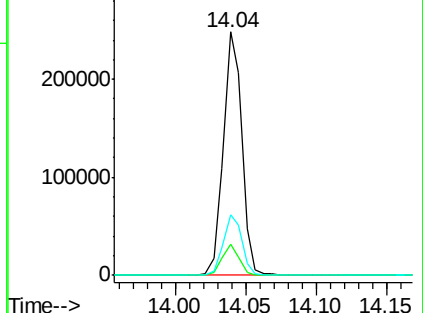
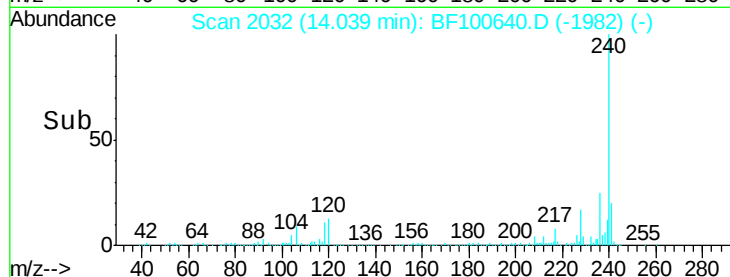
236 25.0 20.7 31.1



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#77

Pyrene

Concen: 16.85 ng

RT: 12.84 min Scan# 1829

Delta R.T. -0.01 min

Lab File: BF100640.D

Acq: 16 Nov 2017 19:35

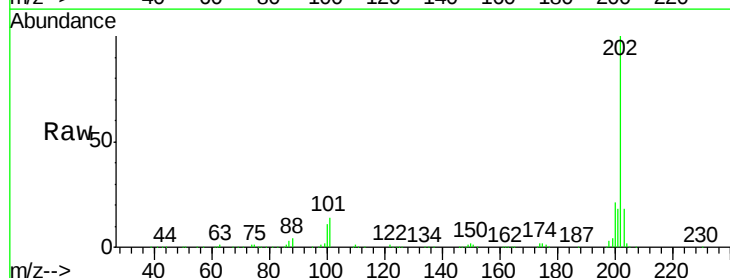
Tgt Ion:202 Resp: 271999

Ion Ratio Lower Upper

202 100

200 21.4 17.4 26.2

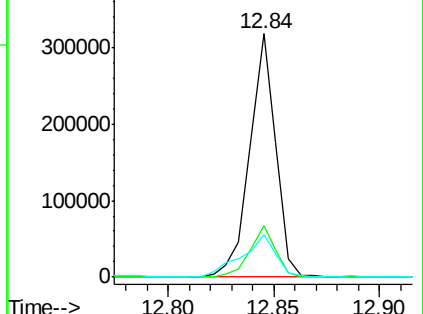
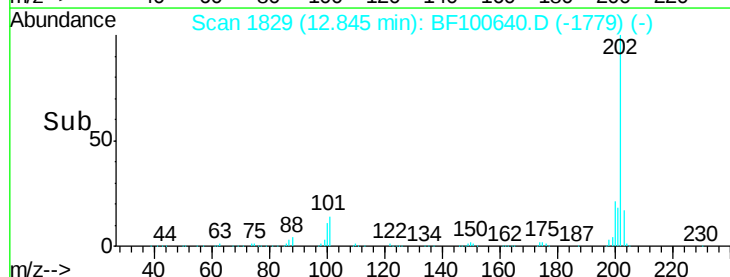
203 17.5 14.3 21.5

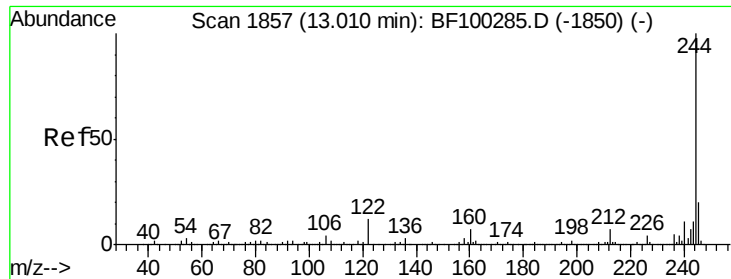


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

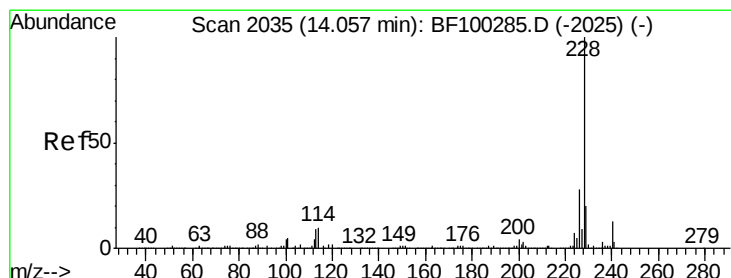
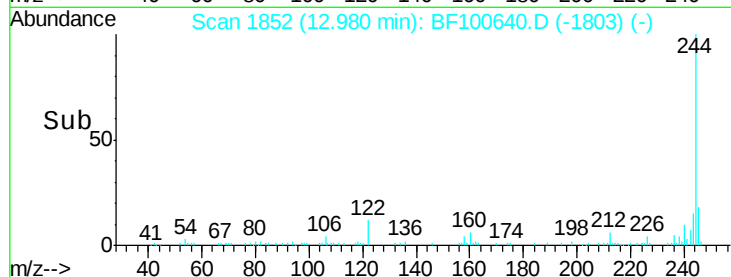
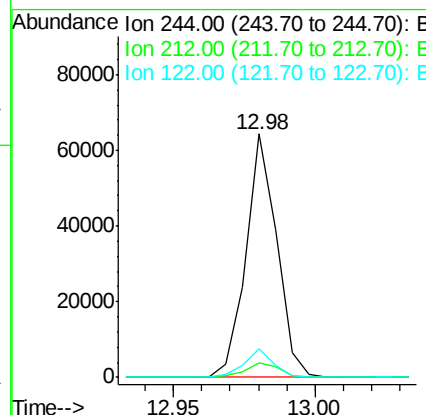
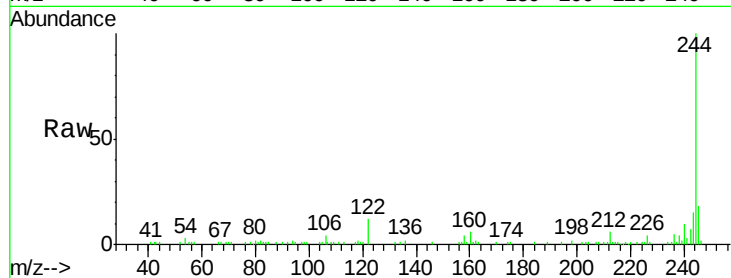




#78  
 Terphenyl-d14  
 Concen: 4.94 ng  
 RT: 12.98 min Scan# 1852  
 Delta R.T. -0.01 min  
 Lab File: BF100640.D  
 Acq: 16 Nov 2017 19:35

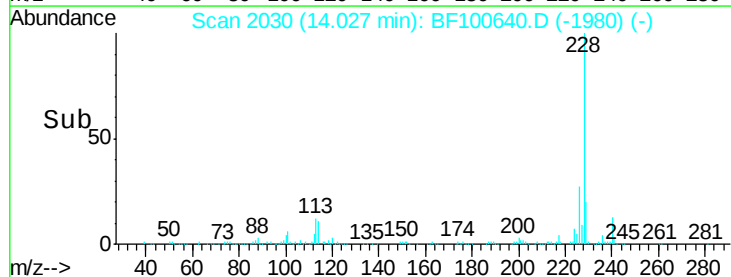
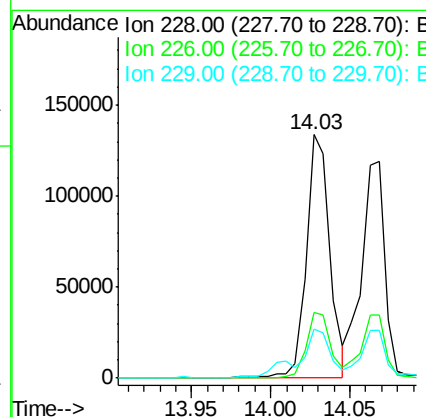
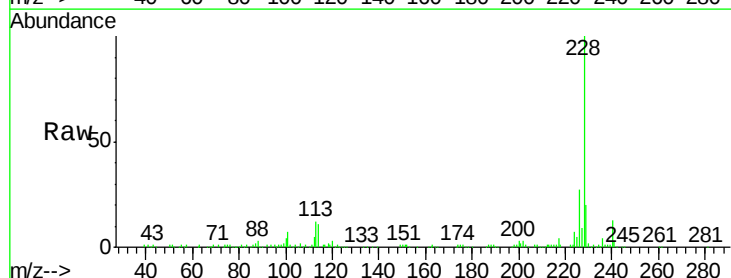
Instrument :  
 BNA\_F  
 ClientSampleId :  
 W-1

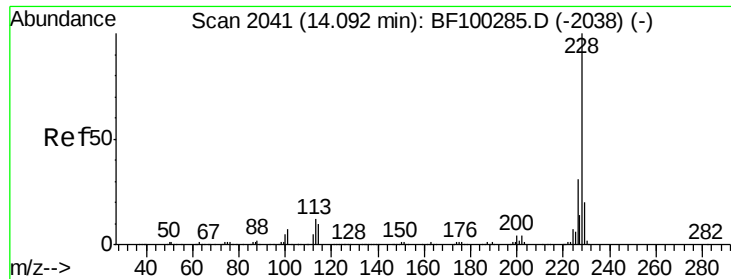
Tgt Ion:244 Resp: 48657  
 Ion Ratio Lower Upper  
 244 100  
 212 6.1 5.4 8.0  
 122 11.8 11.0 16.4



#80  
 Benzo(a)anthracene  
 Concen: 10.07 ng  
 RT: 14.03 min Scan# 2030  
 Delta R.T. -0.01 min  
 Lab File: BF100640.D  
 Acq: 16 Nov 2017 19:35

Tgt Ion:228 Resp: 137323  
 Ion Ratio Lower Upper  
 228 100  
 226 27.0 22.6 33.8  
 229 20.1 15.8 23.6





#82

Chrysene

Concen: 9.38 ng

RT: 14.07 min Scan# 2037

Delta R.T. -0.01 min

Lab File: BF100640.D

Acq: 16 Nov 2017 19:35

Instrument :

BNA\_F

ClientSampleId :

W-1

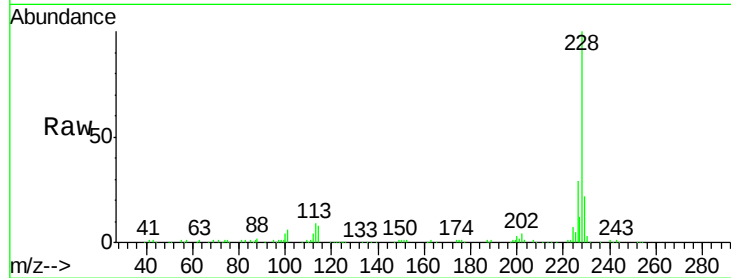
Tgt Ion: 228 Resp: 123916

Ion Ratio Lower Upper

228 100

226 29.0 25.0 37.6

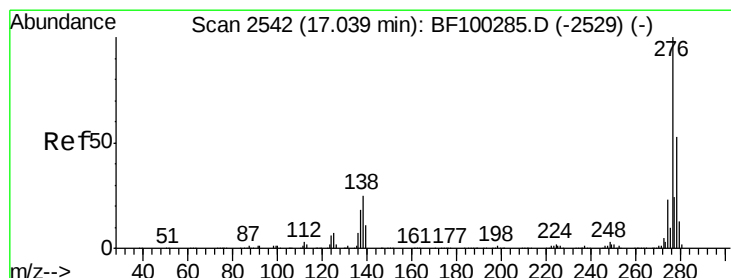
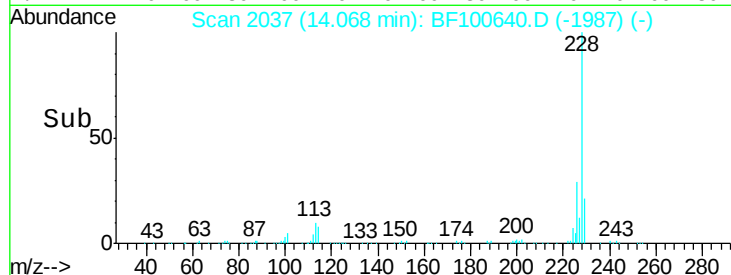
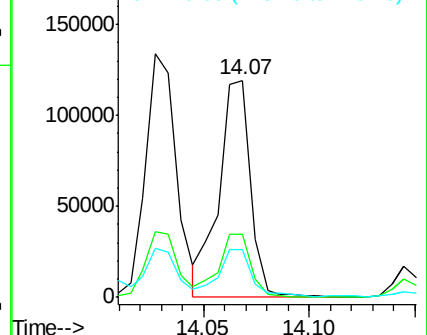
229 22.1 16.2 24.4



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#85

Indeno(1,2,3-cd)pyrene

Concen: 6.06 ng

RT: 16.99 min Scan# 2534

Delta R.T. -0.01 min

Lab File: BF100640.D

Acq: 16 Nov 2017 19:35

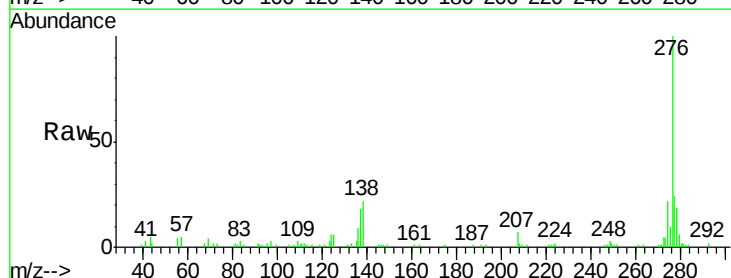
Tgt Ion: 276 Resp: 64737

Ion Ratio Lower Upper

276 100

138 25.3 25.0 37.6

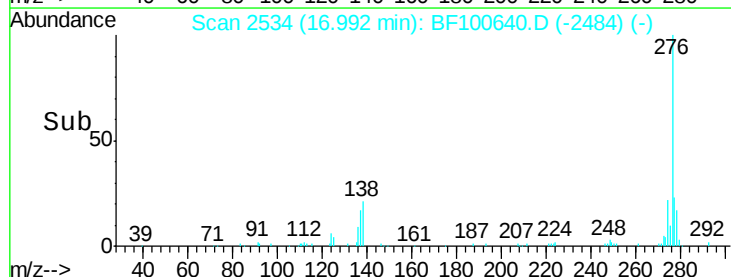
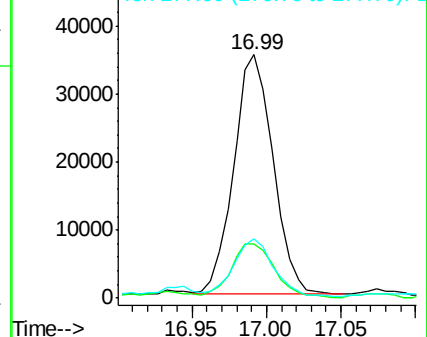
277 23.7 20.1 30.1

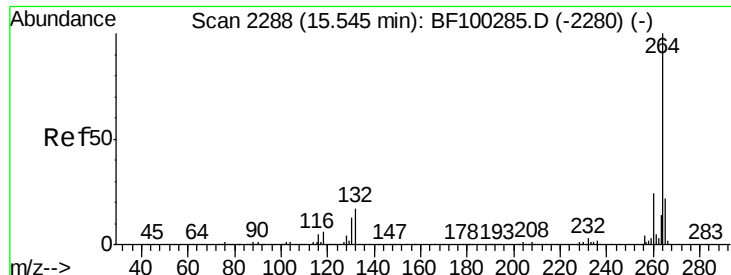


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



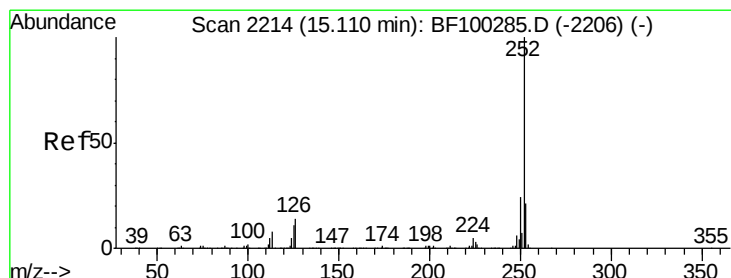
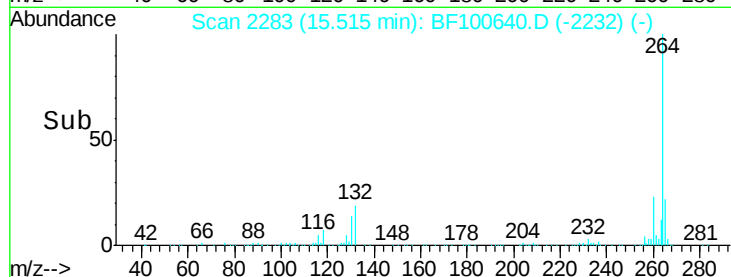
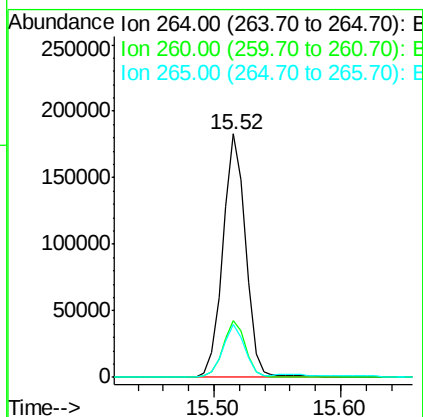
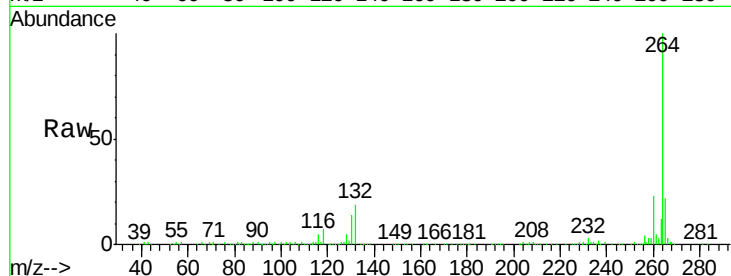


#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 15.52 min Scan# 2283  
Delta R.T. 0.00 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

Instrument :  
BNA\_F  
ClientSampleId :  
W-1

Tgt Ion: 264 Resp: 227956  

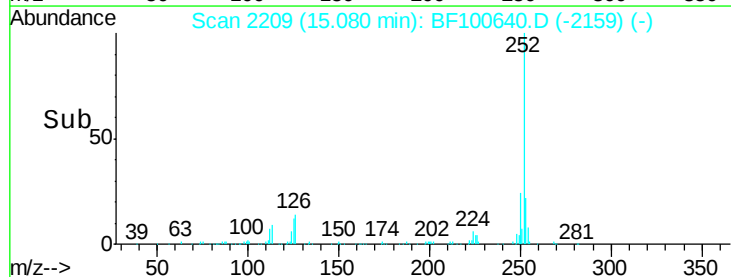
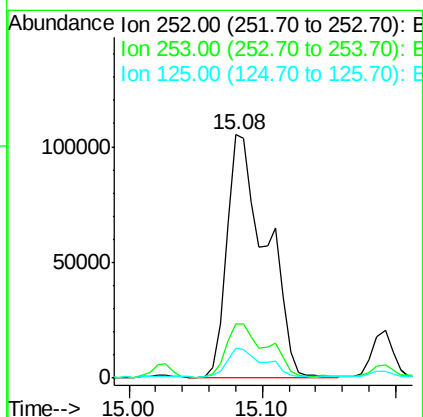
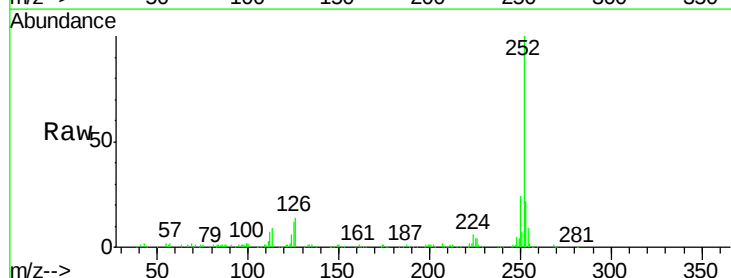
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 264 | 100   |       |       |
| 260 | 23.3  | 19.2  | 28.8  |
| 265 | 21.8  | 17.5  | 26.3  |

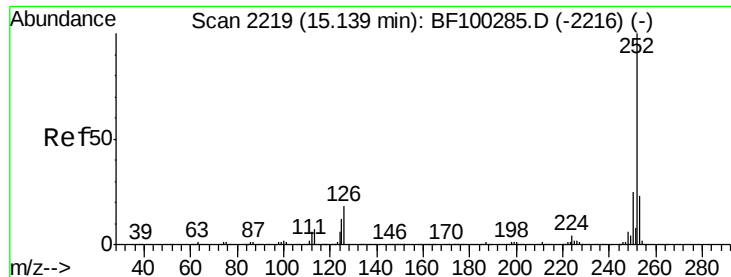


#87  
Benzo(b)fluoranthene  
Concen: 15.86 ng  
RT: 15.08 min Scan# 2209  
Delta R.T. -0.01 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

Tgt Ion: 252 Resp: 214166  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 22.1  | 17.0  | 25.6  |
| 125 | 12.3  | 9.0   | 13.6  |

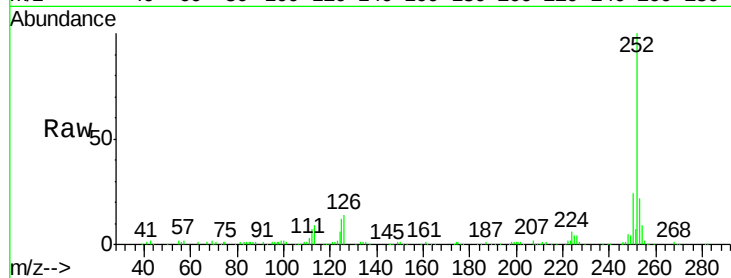




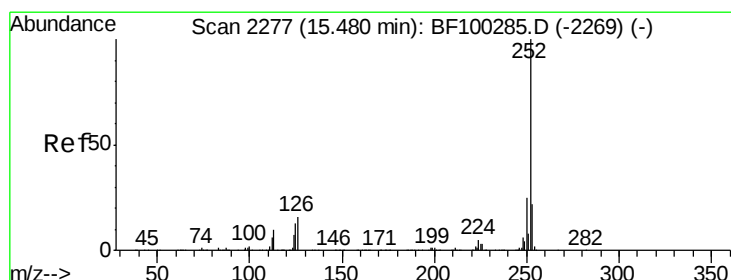
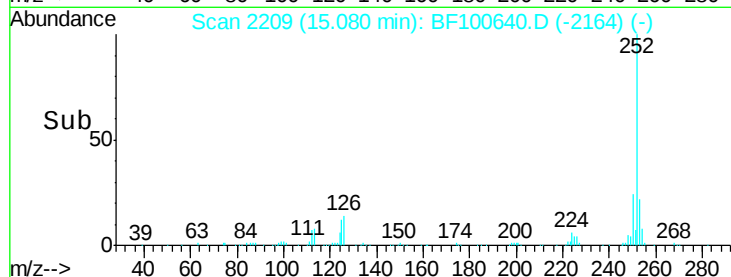
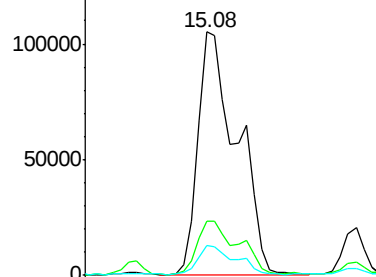
#88  
Benzo(k)fluoranthene  
Concen: 16.78 ng  
RT: 15.08 min Scan# 2209  
Delta R.T. -0.04 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

Instrument :  
BNA\_F  
ClientSampleId :  
W-1

Tgt Ion:252 Resp: 214166  
Ion Ratio Lower Upper  
252 100  
253 22.1 17.9 26.9  
125 12.3 10.2 15.2

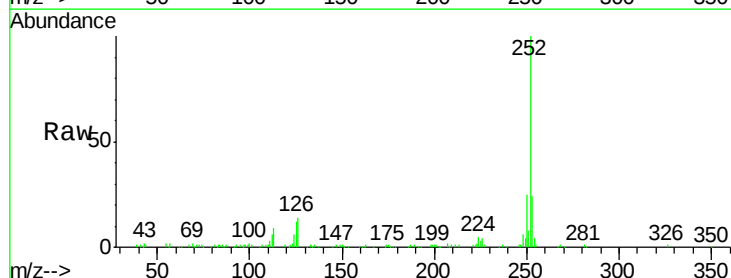


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

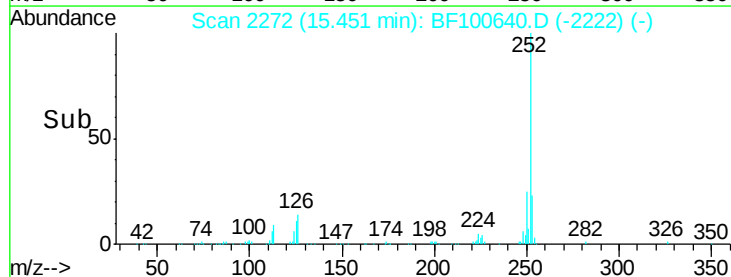
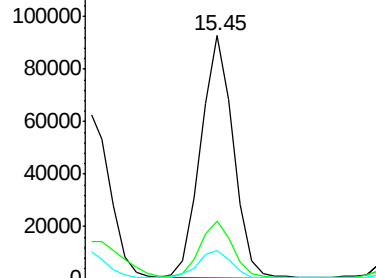


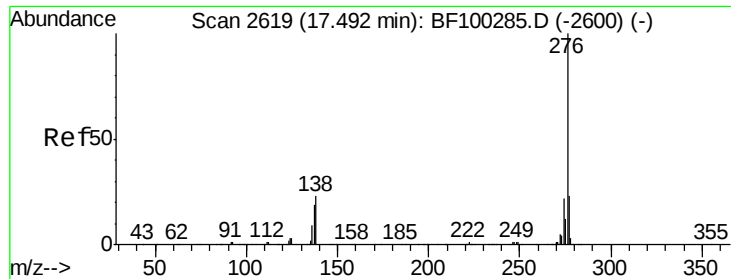
#89  
Benzo(a)pyrene  
Concen: 8.93 ng  
RT: 15.45 min Scan# 2272  
Delta R.T. -0.01 min  
Lab File: BF100640.D  
Acq: 16 Nov 2017 19:35

Tgt Ion:252 Resp: 106902  
Ion Ratio Lower Upper  
252 100  
253 23.6 17.1 25.7  
125 11.8 9.8 14.6



Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E





#91

Benzo(g,h,i)perylene

Concen: 6.07 ng

RT: 17.44 min Scan# 2611

Delta R.T. -0.01 min

Lab File: BF100640.D

Acq: 16 Nov 2017 19:35

Instrument :

BNA\_F

ClientSampleId :

W-1

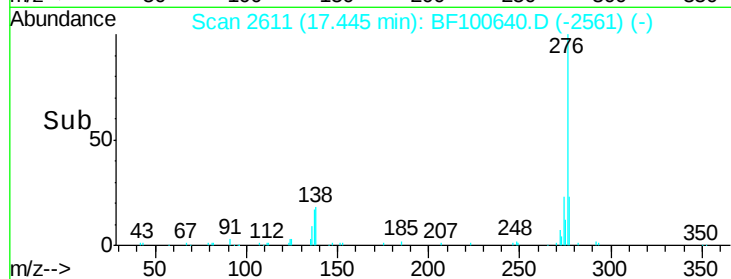
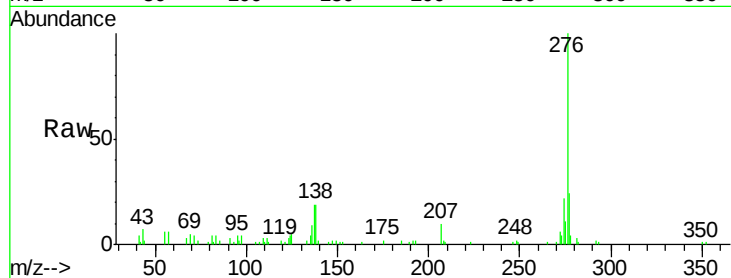
Tgt Ion: 276 Resp: 58217

Ion Ratio Lower Upper

276 100

277 23.9 17.9 26.9

138 19.2 21.8 32.8#



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

